

REMARKS

Claims 1-50 were originally presented in the subject application. Claims 1-3, 8, 10-14, 18, 22-32, 35-39 and 42-47 were amended, and claims 15, 19 and 48 canceled, in a response dated November 5, 2007. Claims 16 and 20 have hereinabove been amended to more particularly point out and distinctly claim the subject invention. No claims have herein been added. Non-method claims 23-47 and 49-50 have herein been canceled without prejudice. Applicants reserve the right to file the non-method claims in a continuation application. Therefore, claims 1-14, 16-18 and 20-22 remain in this case.

The addition of new matter has been scrupulously avoided. In that regard, the amendments to claims 16 and 20 merely correct dependencies noted in the final Office Action that were altered by a prior amendment. The amendments to the specification merely delete URL's, as required by the final Office Action.

Applicants respectfully request reconsideration and withdrawal of the various grounds of objection and rejection.

Objection to Specification

The final Office Action objected to the specification for containing embedded hyperlinks. In response, Applicants have amended paragraphs 0020, 0025 and 0035 to remove the URL's therein.

As amended, Applicants submit that the specification is now in proper form.

Objection to Claims

The final Office Action objected to claims 16, 20 and 49 for depending upon canceled claims, requiring correction.

In response, Applicants have amended claims 16 and 20 to correct the dependencies stemming from the prior cancellation. However, with respect to claim 49, the objection is

now moot, since that claim has been canceled without prejudice with the other non-method claims.

35 U.S.C. §101 Rejection

The Office Action rejected claim 37 under 35 U.S.C. §101, as allegedly directed to non-statutory subject matter. Applicants respectfully submit that this rejection is moot in light of Applicants' cancellation of claim 37.

35 U.S.C. §102 Rejection

The Office Action rejected claims 1-12 and 15-50 under 35 U.S.C. §102(e), as allegedly anticipated by Borkowski et al. (U.S. Patent No. 6,978,455). Applicants respectfully, but most strenuously, traverse this rejection as it applies to the amended claims.

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In this instance, Applicants submit that Borkowski fails to disclose at least one element of each of the independent claims and as a result does not anticipate, or even render obvious, Applicants' invention.

Claim 1 recites a method of managing execution of requests of a computing environment. The method comprises obtaining by a processor of the computing environment a request to be processed, starting a virtual machine on the processor to process the request, the virtual machine being exclusive to the request, and processing the request by the virtual machine.

Against the claimed request to be processed, the final Office Action cites to Borkowski at column 2, lines 62-67. In that scenario, the alleged "request to be processed"

must come from the host application. However, the Borkowski machine proxies are not started in order to process the request, but are started when the physical teller/scanner machines come online, in order to handle communications for the physical teller/scanner machines. Thus, applicants submit that Borkowski does not start the proxies to process the request. In contrast, claim 1 recites starting the virtual machine to process the request. Further, a proxy in Borkowski is not exclusive to the *request*, but exclusive to a physical teller/scanner machine. Proxies are not, for example, created for each request, but for each physical teller/scanner machine. The proxy for a given teller/scanner is used for all communications between the host application and the teller/scanner.

Therefore, for at least the reasons noted above, Applicants submit that claim 1 cannot be anticipated by Borkowski.

Claims 18 and 22 each include aspects similar to those argued above with respect to claim 1. Thus, the remarks made above with respect to claim 1 are equally applicable thereto. Therefore, Applicants submit that claims 18 and 22 also cannot be anticipated by Borkowski.

Applicants submit that the dependent claims are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations.

For example, claim 2 recites that the starting of the virtual machine is managed at least in part by another virtual machine of the processor. Against claim 2, the final Office Action cites to Borkowski at column 4, lines 25-47 and column 5, lines 6-11. The first cited section of Borkowski discloses that the virtual machine manager (VMM) provides an optional mechanism (mapping) for the host application to uniquely identify each physical teller/scanner machine. The second cited section of Borkowski discloses that the machine proxies and the VMM communicate with the host application interface through protected memory. There is no indication therein that the interface is a virtual machine. Further, as confirmed by Borkowski at column 3, lines 21-31, starting a proxy is clearly controlled by

the VMM, which is nowhere indicated in Borkowski as a virtual machine. Thus, since the VMM controls proxy creation, and the VMM is not itself a virtual machine, Applicants submit there is no indication in Borkowski that the starting of the proxies is managed at least in part by a virtual machine.

Therefore, for at least the reasons noted above, Applicants submit that claim 2 cannot be anticipated by Borkowski.

Similarly, Applicants submit that the request in Borkowski is not received by another virtual machine of the processor, as recited in claim 3, since the request from the host application is received through the interface by the VMM, neither of the interface or VMM being disclosed in Borkowski as a virtual machine. Further, since there is no disclosure in Borkowski of the VMM being a virtual machine and it is clear that starting of the proxies is handled by the VMM exclusively, the claim 3 recitation of starting the virtual machine by another virtual machine also cannot be met.

Therefore, for at least the reasons noted above, Applicants submit that claim 3 also cannot be anticipated by Borkowski.

As still another example, claim 4 recites that receiving the request of claim 3 comprises receiving the request from a job management service coupled to the another virtual machine (i.e., the one that starts the first virtual machine).

Against claim 4, the final Office Action cites to the command code state machine 314 of FIG. 3 and column 3, lines 64-67 of Borkowski. However, there is no disclosure in Borkowski of the VMM or the command code state machine being a virtual machine. Moreover, it is clear from claim 4 that the request comes from a job management service; yet, Borkowski makes clear that the request always comes from the host application, the command cache state machine merely providing a mechanism to help the VMM deal with initialized/uninitialized commands.

Therefore, for at least the reasons noted above, Applicants submit that claim 4 cannot be anticipated by Borkowski.

As still another example, claim 5 recites that starting the virtual machine comprises providing one or more resources to the virtual machine to process the request.

Against claim 5, the final Office Action cites to Borkowski at column 3, lines 21-50. However, while the cited section of Borkowski may indicate resources provided to the VMM, the VMM itself is not a virtual machine. The VMM manages the proxies, which are the alleged virtual machines, but that does not make the VMM itself a virtual machine. Further, there is no indication within Borkowski itself that the VMM is a virtual machine.

Therefore, for at least these reasons, Applicants submit that claim 5 also cannot be anticipated by Borkowski.

As still a further example, claim 6 recites shutting down the virtual machine, in response to completing the request.

Against claim 6, the Office Action cites to Borkowski at FIG. 4, element 412, and column 3, lines 50-58. However, the cited sections of Borkowski actually speak to a power down of the teller/scanners leading to shut down of the state machine 314 in FIG. 3, not the proxies. As noted above, there is no indication that state machine 314 is a virtual machine. Even ignoring that, Applicants submit that nothing is shut down in response to completing a request, but rather, in response to powering down of a teller/scanner machine. Moreover, as noted in Borkowski at column 3, lines 32-39, a proxy stays online to communicate with the host application after its corresponding physical machine disconnects.

Therefore, for at least the reasons noted above, Applicants submit that claim 6 cannot be anticipated by Borkowski.

With regard to claim 7, see claim 5, which also speaks to resources provided to the virtual machine.

With regarding claim 8, the final Office Action cites to column 13 of Borkowski; however, there is no column 13. Nonetheless, Applicants submit the VMM is not a virtual machine, but a manager of proxies to physical machines. Further, Borkowski speaks to disconnecting of a physical teller/scanner, in which case its corresponding proxy continues to communicate, but does not go into how the proxies are actually shut down. FIG. 4 and the discussion thereof speaks to state machine 412, but there is no indication state machine 412 is a virtual machine.

Therefore, for at least these reasons, Applicants submit neither claim 8 or 9 can be anticipated by Borkowski.

As still a further example, claim 11 recites determining which processor of the plurality of processors is available to process the request, and sending the request to the processor determined to be available.

Against claim 11, the final Office Action cites to column 3, lines 21-39 of Borkowski. However, the term "alive" used in the cited section of Borkowski refers to the physical teller/scanner machines coming online. As shown in FIG. 3 of Borkowski, the processor 302 is a separate entity from the physical machines and there is only one processor as clearly disclosed in Borkowski at column 2, lines 48-51. Since claim 11 depends from claim 1, Applicants submit that the arguments of the final Office Action for claim 1 need to be consistent with claim 11. Applicants submit that the argument for claim 1 cites the actual processor 302 of Borkowski, which is different from the teller/scanner machines, and inconsistent with the argument of claim 11. In any case, there are not multiple processors in Borkowski.

Therefore, for at least the reasons noted above, Applicants submit that claim 11 cannot be anticipated by Borkowski.

As still another example, claim 16 recites providing from the virtual machine to a job management service information regarding the request being processed.

Against claim 16, the final Office Action cites to the command code state machine 314 in FIG. 3 of Borkowski along with column 3, lines 64-67. However, as noted above, there is no disclosure in Borkowski of the VMM or the command code state machine being a virtual machine. Moreover, it is clear from claim 16 that the information about the request is provided from the virtual machine to the job management service; yet, Borkowski does not disclose the alleged virtual machines (the proxies) sending information to the command code state machine, the command cache state machine merely providing a mechanism to help the VMM deal with initialized/uninitialized commands. Thus, only the VMM communicates with the state machine, not the proxies. Therefore, for at least the reasons noted above, applicants submit that claim 16 cannot be anticipated by Borkowski.

Therefore, for at least the reasons noted above, Applicants submit that claim 16 also cannot be anticipated by Borkowski.

#### Reply to Response to Arguments

In the Response to Arguments beginning at page 12 of the final Office Action, it is argued that Borkowski's use of semaphores reads on the claim 1 recitation of the "virtual machine being exclusive to the request" according to an alleged definition provided in the specification in numbered paragraph 0018. However, the cited section of the application was not provided as a definition, but an example of a benefit, and applicants submit that the final Office Action unduly reads limitations in from the specification. Just as Applicants are not allowed to do this, the final Office Action is also not allowed to do so. The fact is that the claim recites a virtual machine exclusive to a request. The Borkowski proxies are not exclusive to the requests, but exclusive to physical teller/scanner machines, and handle all communications (including requests) with the host application. Applicants understand the concept of giving the claims broadest reasonable interpretation during examination, but do not agree with reading limitations in from the specification.

The Response to Arguments also asserts that machine proxies in Borkowski are "virtual machines." Even assuming, for the sake of argument, that this is true, neither the

virtual machine manager, nor the state machine shown in FIG. 3 of Borkowski are themselves virtual machines. As described above in the claim rejection remarks, this fact is fatal to the logic of the rejections.

CONCLUSION

Applicants submit that the dependent claims not specifically addressed herein are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations.

For all the above reasons, Applicants maintain that the claims of the subject application define patentable subject matter and earnestly request allowance of claims 1-14, 16-18 and 20-22.

If a telephone conference would be of assistance in advancing prosecution of the subject application, Applicants' undersigned attorney invites the Examiner to telephone him at the number provided.

Respectfully submitted,

*Wayne F. Reinke*

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Wayne F. Reinke  
Attorney for Applicants  
Registration No.: 36,650

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HESLIN ROTHENBERG FARLEY & MESITI P.C.  
5 Columbia Circle  
Albany, New York 12203-5160  
Telephone: (518) 452-5600  
Facsimile: (518) 452-5579